Contra Costa County
Delta Water Platform

Introduction

A healthy Delta is key to our physical, societal and economic health

A healthy, vibrant Sacramento-San Joaquin Delta Estuary is closely tied to the physical, societal and economic health of those who live, work and recreate in the San Francisco Bay-Delta region and throughout much of the state.

A healthy Delta requires sufficient water supply of good quality; and habitat for healthy populations of fish and other native aquatic, terrestrial and avian species, both migratory and year-round. A healthy Delta would protect people and property (through strong levees, comprehensive emergency response and a water supply of good quality). A healthy Delta would promote economic health of the region and sustain agriculture (managed for habitat and food production), recreation activities (recreational fishing, boating, camping, hiking) and commerce (industry, ports, shipping and commercial fishing).

To date, the health of the Delta has not been a priority, given the state's thirst for water. It is becoming increasingly apparent that an ailing Delta is detrimental to our health, safety and welfare. All indicators of a healthy delta show significant decline. It is imperative to act quickly to improve the health of the Delta, before irreparable harm is done.

Contra Costa County has developed this Delta Water Platform to identify and promote activities and policy positions that support the creation of a healthy Sacramento-San Joaquin Delta. Contra Costa County will use this Platform to guide its own actions and its advocacy in other public venues regarding the future of the Delta.

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Not in priority order

All policies are listed as bullets and are in bold under the subject categories.

Support Short Term Actions to be implemented immediately

- **Support and advocate for immediate implementation of specific short-term actions to improve the ecosystem, water quality, and the fishery.** These projects include;
  - western and central delta levee improvements.
  - water quality and fishery improvements at Franks Tract.
  - additional and improved fish screens at pumps.
  - subsidence reversal.
  - habitat improvement projects.
  - emergency response planning.

Conveyance: Through-Delta and Isolated Conveyance

- **Support through-Delta conveyance.**
- **Support the "common Delta pool" doctrine.**
- **Support study of all other credible alternative conveyance strategies.**

The "common Delta pool" concept is one in which the common resource (the Delta) provides the same quality freshwater supply to all Delta diverters, which share responsibility to maintain, restore, and protect the resource. Through-Delta conveyance is the method by which this is accomplished, by allowing Sacramento River flow through Delta channels to the south Delta and the export pumps.

- **Isolated Water Transfer: The following key planning issues must be addressed in a timely manner or a renewed opposition position on an Isolated Water Transfer Facility (Peripheral Canal) will be considered:**
  - **Maintain/Restore Delta water quality and supply for existing area users.**
  - **Ensure adequate outflow to the Bay for ecosystem health.**
  - **Consider reduced export scenarios in new (proposed) plans and programs.**

- **Incorporate Regional self sufficiency (each region needs to maximize conservation and reuse, implement storage options, and consider desalination to help relieve stress on the Delta) as part of any new water or flood control system.**
- **Delta ecosystem improvements and through-Delta conveyance improvements need to be implemented before an isolated facility is substantively planned, designed, and/or constructed.**
- **An isolated facility and mitigation related to an isolated facility needs to be paid for by the beneficiaries rather than by the taxpayers.**
- **Protections for and improvements to the Delta ecosystem, fisheries, water quality, water supply, and levees need to be incorporated into any new water management plans.**
- **Proposed projects and programs must analyze impacts on the whole San Francisco Bay-Delta system, in addition to the Delta.**

Currently planned isolated water transfer scenarios would affect the common Delta pool, since all diverters would no longer be taking water from the same "pool". There would be no incentive for exporters using a Peripheral Canal to preserve the Delta resource.

Dual conveyance is also being considered, which would allow some through-Delta and some isolated conveyance. Existing information suggests that isolated facilities would degrade water quality in the Delta and compromise outflows from the Delta to the Bay by removing significant amounts of high quality Sacramento River water and leaving lesser amounts of poor quality San Joaquin River water in the system, (the degree of impact is dependent on a number of factors including amount of exports, when and where water is taken, capacity etc.) There is an expectation by some parties that a new isolated facility (depending on how it is defined), coupled with storage, may have potential to improve operational flexibility to meet both ecosystem and water supply needs.

Conveyance studies currently being conducted by DWR on a peripheral canal include an eastern alignment as well as a western alignment that runs through Contra Costa County.

The current state of the Bay-Delta Estuary is negatively impacted by lack of water in the system (i.e. high volume exports, especially during dry years), and the amount of exports is at least partially responsible for the recent collapse of the Delta ecosystem.

Diversion of a significant amount of flow from the Sacramento River will have adverse impacts to water quality by, among other things, creating a saline environment in the west Delta and by allowing more pollutant-laden San Joaquin River water into the Delta (significantly less San Joaquin River water would be pumped south). Current proposals include creating a saline (tidal) ecological environment for the western Delta or with "variable" water quality (brackish/saltwater with fresh flow pulses) in place of the current freshwater regime.

Some studies are illustrating a conflict between a higher water quality standard needed for human consumption and the optimal water quality for ecosystem health, with its myriad of micro-organisms. This could create a conflict for western delta water users.

Water Storage

- **Support multi-purpose storage options that incorporate water supply, flood control, surface water and groundwater storage and ecosystem components, (addressing projected climate change impacts).**
- **Support groundwater storage/conjunctive use implementation wherever practicable and as an option that is preferable to surface storage options.**
- **Support continued consideration of Delta island-as-reservoir strategies (such as the Delta Wetlands Project).**
- **Support groundwater management programs and support funding for groundwater projects that have the effect of reducing demand on the Delta.**
- **Support detailed study of groundwater basins throughout California, and conjunctive use opportunities.**

The State's existing water supply and flood control systems are inadequate and, with climate change (decreased Sierra snow-pack, and increased rainfall, flood, and sea level rise), will become even more so. The proposed traditional, large-scale, single-purpose surface storage facilities need to evolve into smaller, regional, multi-purpose facilities. Multi-purpose facilities can better address climate change impacts and are more cost-efficient than traditional surface storage facilities.

Conjunctive use is the management of groundwater and the aquifer in which it resides through recharge with surplus surface water. Groundwater is then typically used during dry periods when surface water supplies are not as abundant. Conjunctive use has fewer environmental impacts than surface storage options.

Protect and Restore the Delta Ecosystem

- **Support ecosystem-based scientific research to determine what is necessary to protect and restore the Delta and support**

implementation of recommended actions resulting from these studies.

- **Support efforts to restore native fish populations;**
  - **Thresholds for healthy fish populations must be set significantly higher than past estimates to avoid species' continued listing as endangered.**
  - **Restore and maintain the commercial and recreational salmon fishery in the Bay-Delta ecosystem by implementing state and federal policies of doubling salmon populations.**
- **Support acquisition of priority habitat areas (aquatic and terrestrial).**
- **Support habitat improvement projects** (including Dutch Slough, Suisun Marsh).
- **Support projects that benefit migrating waterfowl.**
- **Support study of mercury methylation in planning, evaluation, restoration and monitoring activities.**

Methyl mercury is a bio-available form of mercury that accumulates in the food chain and is highly toxic. Methylation is the process by which mercury becomes chemically active.

Water Conservation

- **Support and encourage water conservation activities as a primary first step in any proposed statewide water management strategy.**
- **Support and encourage water conserving landscapes.**
- **Maximize reuse of reclaimed wastewater.**
- **Support acceleration of mandatory water meter requirements throughout the state.**
- **Support and advocate for improved agricultural water conservation practices.**
  - **Encourage elimination of high water use crops such as cotton, alfalfa, and rice (with exceptions where there are multiple benefits).**
  - **Encourage creation of significant water savings through improved agricultural conservation practices.**
  - **Support detailed study of agriculture in California; what has been done to conserve water and what can be done in the future to attain greater efficiency.**

The County has historically supported conservation through development of a water conservation landscape ordinance, a dual plumbing ordinance to maximize use of recycled water where feasible, and an ordinance to use recycled water for dust control and compaction for construction purposes during drought. Water conservation is emphasized, as it has multiple benefits: it reduces water demand, reduces water treatment requirements and reduces energy use.

The recycled water ordinances are dependent upon the level of commitment of the respective water districts and, to some extent, the wastewater agencies, to provide recycled water. It is anticipated that additional state conservation requirements will be forthcoming as a result of the Governor's declaration of a comprehensive water plan (20% reduction in water use by 2020). The County could also consider expansion of greywater use where practicable.

A regional self-sufficiency policy would dictate that conservation, regional groundwater and surface water storage, reuse of reclaimed wastewater and even desalination (where practicable) should be required in areas dependant upon exports from the Delta.

Governance

- **Support a new Delta ecosystem and water management governance structure, which should as a primary task, restructure and regulate management of the State Water Project and the Central Valley Project.**
- **Support and strongly advocate for local government representation in any new governance structure(s) contemplated for the Delta.**
- **Support continuance of land use authority in the Delta through the 1992 Delta Protection Act, (which established the Delta Protection Commission, a state agency with local representation) and support greater representation of local elected officials as part of this body.**

The Governor, his Delta Vision Blue Ribbon Task Force, and the Legislature are considering alternate structures for governance of the Delta in the areas of Water Supply and Ecosystem, Land Use and creation of a possible Delta Conservancy. There is a great deal of concern over development of the Delta floodplain and adjacent areas. As a result, consideration of alternative land use authorities and new legislation is currently being contemplated.

There is an inherent conflict between ecosystem health and the supply of water to California which needs to be addressed. Because of the significantly degraded state of the Delta, there is recognition that the priorities of existing agencies will not include the ecosystem in a meaningful way. The Delta Vision process has recognized that ecosystem and water supply are co-equal goals that cannot adequately be addressed within the existing governance structure. Restructuring and regulating the State Water Project and Central Valley Project are identified as a critical first step, as these are by far the largest water users.

Any governance structure should be managed in an objective, knowledgeable and representative manner. The governing body should have funding to conduct studies to generate the information necessary to manage the system, refine it as necessary and meet management objectives to avoid constantly operating in crisis mode.

Levee Restoration

- **Advocate for significant funding for western and central Delta (infrastructure protection) levees, individually and in collaboration with others (beneficiaries also pay).**
- **Support immediate rehabilitation of priority levees on the western and central Delta islands.**
- **Support funding assistance for small urban communities within the Delta to attain 200-year levee standards**.
- **Support using PL-84-99 as a minimum design standard for levees.**
- **Support stockpiling rock in the Delta (and specifically in the western Delta) for levee repair.**
- **Support a multi-year funding commitment to restore non-project levees and levees outside the State Plan of Flood Control.**
- **Support and advocate for the Delta Long Term Management Strategy (LTMS) and the beneficial reuse of dredged materials for levee rehabilitation.**

The County has long supported the ongoing maintenance and structural restoration of Delta levees and has actively advocated for funding toward this end, establishing the Delta Levee Coalition with the Contra Costa Council. The eight western Delta islands (six of which are within the County) are critically important, not only to residents, but also to the protection of water quality and supply to 25 million Californians by preventing saltwater intrusion into the Delta.

The water exporters and the State Department of Water Resources (DWR) have reevaluated the importance of these western delta levees and are reluctant to commit significant funding (funding that could go to a canal instead) due to several factors. First, DWR has placed rock for "emergency purposes" in several areas of the Delta to block the channels (preventing saltwater intrusion for exporters) in the event of a multiple levee break. Second, the western levees are thought to be at higher seismic risk, due to nearby faults, and as a result, will be more expensive to fix than levees in the larger Delta.

The levees protect many areas that are below sea level due to subsidence, rendering the levees less stable. Climate change impacts of rising sea level and higher flow regimes (due to greater rainfall, less snow) will exacerbate the situation. Recent work by local Delta engineering firms have established that levee repair costs for western Delta levees are not as high as anticipated by DWR's studies, and there are additional options to reduce seismic risk.

Levees also protect critical infrastructure including EBMUD's aqueducts, highways, railroads, gas wells, electric lines etc.

Smaller communities behind levees, such as Bethel Island, Hotchkiss Tract and other communities should benefit from the same level of protection as larger "urban" communities. Urban communities (over 10,000 population) as defined in recent legislation will be required to have a higher standard of levee protection (from a 100-year to a 200-year standard). Funding support for levee strengthening should also be readily available for small communities protected by levees.

PL-84-99 levee design standards are used by the U.S. Army Corps of Engineers (Corps) for levees over which the Corps has jurisdiction in the Delta. These standards are slightly higher than Hazard Mitigation Plan (HMP) standards currently in use, and are recommended as a minimum standard for Delta islands remaining in agricultural and other non-urban uses. With climate change, it is anticipated that more stringent standards would be required over time. Because of large-scale changes currently being contemplated for the Delta, a number of Delta islands will be converted to other uses, such as habitat (aquatic and terrestrial) and floodplain. As a result, levees on these islands would not be subject to the above-mentioned minimum standards, reducing costs of levee maintenance to some degree.

Water Quality, Water Quantity and Delta Outflow

- **Support efforts to protect and improve water quality, water quantity and Delta outflow.**

- **Demand that any proposed changes to water quality, particularly efforts to increase salinity in the western delta, be based upon proven science which illustrates substantial benefit to habitat and addresses impacts to water users.**
- **Require a guarantee of adequate flows for a healthy Delta. Based on existing information, this will require a permanent reduction in average exports. Use thresholds for healthy fish populations as an indicator to identify adequate flows.**
- **Require consideration of reduced export scenarios in new (proposed) plans and programs.**
- **Support reexamination of the State Water Project and Central Valley Project operations due to the decline of the Delta ecosystem and collapse of the fishery.**

The current state of the Bay-Delta Estuary is negatively impacted by lack of water in the system (i.e. high volume exports, especially during dry years), and the amount of exports are at least partially responsible for the recent ecosystem collapse.

San Joaquin River flows have higher levels of salinity and selenium than Sacramento River water. As a result, an isolated transfer facility taking significant amounts of Sacramento River water out of the system will decrease water quality in the Delta by allowing much more San Joaquin River water into the Delta system. Currently, pumps in the south Delta take some San Joaquin River water south.

Reduced outflows will result in the migration of the salt water/fresh water interface (X2 zone) eastward from its current location near Antioch, impacting municipal and industrial water intakes and habitat.

Pollutant loading in Delta waters in and around the county can be increased either by reducing the Delta outflow or by modifying current water management practices (such as installing an isolated transfer facility). Increased pollutant loads in the Delta will result in modification of water quality standards in County NPDES and TMDL permits for County creeks and streams that discharge into the Delta. This will significantly increase the cost for permit compliance. (See additional discussion under the Peripheral Canal section).

Flood Protection/Floodplain Management

- **Support preparation of a comprehensive Flood Management Plan for the Delta.**

- **Support floodplain management within the watershed to help reduce flood damage within the Delta.**
- **Support identification, acquisition and construction of appropriate flood bypasses in and around the Delta.**
- **Support funding assistance for Flood Control District(s) to bring facilities up to a 200-year level of protection.**
- **Support development of a watershed management plan that would attenuate flood flows naturally by increasing the resident time of stormwater within the entire watershed.**
- **Support efforts to change existing revenue generation requirements for flood control districts, reclamation districts, cities and counties that would provide parity with wastewater districts and water districts in setting rates to provide basic infrastructure services.**

Flood protection standards are changing to a 200 year standard. Flood Control Districts are having a hard time funding new facilities or modifying existing facilities to meet the old standard of 100 years, let alone upgrade to a 200 year standard. There needs to be a funding mechanism in place that allows flood control districts and counties to raise revenue similar to a wastewater district or a water district. Currently Proposition 218 exempts wastewater and water districts from voting requirements to raise rates to properly manage their infrastructure. Proposition 218 needs to be modified to include a similar exemption for flood control and stormwater infrastructure.

In an undeveloped watershed, stormwater remains within the watershed a long time (resident time). As a watershed develops, resident time is reduced and flood flows increase as stormwater quickly runs off paved surfaces. A watershed management plan is a useful tool to develop strategies to increase resident time and help reduce flood flows in a more natural manner.

Water Rights and Legislative Protections

- **Support and preserve existing water rights and legislative protections established for the Delta and its environs.**

The system of water rights in California is governed by 'use', or more specifically, 'beneficial use'. Riparian rights (ownership of land adjacent to a surface water source) are senior water rights over most 'appropriative' water rights (which have required a permit since 1914). Most water users in the Delta use water pursuant to riparian and pre-1914 water rights, which are among the most senior water rights in the state. The

State Water Project and Central Valley Project are based on junior appropriative water rights.

The Watershed Protection Act and the Delta Protection Act (county-of-origin and watershed-of-origin laws) were an integral part of the political and legal negotiations to build and export water from the Delta for the Central Valley Project and the State Water Project. These laws protect future reasonable and beneficial water uses for the areas providing the water so these areas would not be deprived when additional water became necessary. The Delta Vision Task Force has reviewed this issue and questions the need for continuance of these laws. These Acts also include the Delta common pool doctrine.

Regional Self-Sufficiency

- **Support Regional Self-Sufficiency where all regions are required to implement a variety of local water supply options and institute conservation and reuse programs to reduce reliance on exports from the Delta.**

Conservation programs, maximizing reuse of reclaimed wastewater, groundwater and surface water storage, and consideration of desalination where appropriate should be considered as strategies to enhance water supply in areas dependent on exports.

Emergency Response

- **Support collaborative efforts to improve emergency response among the Delta counties to help protect life, diminish suffering, protect property, protect the environment, and speed recovery in the short, medium and long term.**
- **Support stockpiling rock in the Delta for levee repair.**

San Luis Drain/Grasslands Bypass

- **Oppose a San Luis Drain and continue to support in-valley, environmentally-responsible resolution of the drainage problem.**
- **Continue to urge reduction in the discharge of agricultural drainage to the San Joaquin River and its tributaries through**

implementation of the Grasslands Bypass project, including crop fallowing and/or acquisition of problem areas.

San Luis Drain: The U. S. Bureau of Reclamation is under a court injunction to evaluate and implement options for providing drainage services for the west side of the San Joaquin Valley, which contains toxic concentrations of selenium and other hazardous substances. The San Luis Drain, one option studied, would pass through Contra Costa County to discharge in the Delta. The U.S. Bureau of Reclamation has elected to address the problem without building the Drain but Congress would need to appropriate the funds before this alternative could be implemented and the injunction requiring provision of drainage service still looms.

The County will continue to oppose the San Luis Drain option and support instead drainage solutions in the valley, such as reducing the volume of problem water drainage; managing/reusing drainage waters within the affected irrigation districts; retiring lands with severe drainage impairment (purchased from willing sellers); and reclaiming/removing solid salts through treatment, bird safe/bird free solar ponds and farm-based methods.

Grasslands Bypass: Since 1996, the U. S. Bureau of Reclamation has authorized farmers in the Grasslands area of the San Luis-Delta Mendota Water Authority to discharge drainage through an existing portion of the San Luis Drain to a tributary of the San Joaquin in order to bypass wildlife refuges that were previously downstream of the agricultural drainage. The San Joaquin River is the ultimate destination for the drainage with or without the bypass project, known as the Grasslands Bypass Project.

In addition to avoiding the sensitive wetlands in the refuges, the Grassland Bypass Project requires a number of measures to reduce the downstream impacts of the drainage, including creation of a drainage authority to assume responsibility for the farmers' collective obligations, monitoring of discharges and impacts, limitations on the load of selenium and salt in the drainage and various enforcement measures including provisions to terminate the Project if discharge limits are exceeded. In the first eight years of implementation results have been good and discharges have been steadily declining. The County will support continuing reduction in agricultural drainage through the Project such that agricultural drainage discharges to the River will decline to zero no later than 2019.

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Not in priority order

Climate Change

- **Support addressing the impacts of climate change in any proposed studies and strategies, or in planning, engineering and constructing projects envisioned for the Delta.**

Climate change in the Delta will have wide-ranging impacts, due to decreased Sierra snow-pack, and increased rainfall, flood, and sea level rise. Any current or future planning efforts or implementation measures for the Delta must analyze and address the impacts of climate change.